

REMARKS

Claims 1-9 are pending in this application. Claims 1, 2, 4-6 and 9 have been rejected under 35 U.S.C. §102(a) as being anticipated by an International Patent Application No. WO 99/04521 (Agarwal). Claims 1-9 have been rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,542,490 (Ahmadvand) in view of U.S. Patent No. 5,805,822 (Long) and in view of U.S. Patent No. 6,226,301 (Cheng). Claims 3, 7 and 8 have been rejected under 35 U.S.C. §103(a) as unpatentable over Agarwal in view of U.S. Patent No. 5,546,549 (Barrett).

1. Rejection of independent Claims 1 and 5 under §102(a)

Regarding the §102(a) rejection of Claims 1 and 5, and as indicated in the Response to Arguments section on page 6 of the Office Action, Applicants respectfully submit that the distinguishing elements of the claims of the present application over the cited references, as presented in the prior Response filed on January 5, 2004, require clarification. The arguments presented in the January Response focused on the fact that independent Claim 1 of the present application recites, among other elements, “segmenting a data stream...into a plurality of consecutive blocks having a variable data length, each said consecutive block being segmented into a plurality of sub-consecutive blocks having a byte length”. Essentially, two segmentations are occurring, i.e. data stream into blocks and blocks into sub-blocks. Agarwal describes a method for the adaptive control of a forward error correction code for transmission between a terrestrial cell/packet switch at a first terminal and a satellite/wireless network connecting to a second terminal. Agarwal does not anticipate the element of Claim 1 recited above, and the similar element of Claim 5.

The Examiner is respectfully directed to page 43, lines 17-19 in the detailed description of Agarwal et al., wherein a description of Fig. 10 is provided. A Packet # and a SEQ # are disclosed therein. In this regard, the Packet # increments for each new frame relay packet and the SEQ # increments with each frame relay packet. In contrast, claims of the present application disclose segmenting a data stream into a block and a sub-consecutive block and assigning sequence numbers to each of the block and the sub-consecutive block. However, the claims of the present application disclose transmitting data in a frame unit as an actual transmission unit

and transmitting the sequence numbers of a block and a sub-consecutive block related to the frame. Referring to FIG. 7 of the present application, whenever a new block (0-3) is input, the sequence number of the block is increased, but the sequence number of the sub-consecutive block is **not** increased. That is, the claims of the present application disclose transmitting data in a frame unit, so the transmitted data transmits sequence numbers of a block and a sub-consecutive block. Further, referring to FIG. 13B of Agarwal et al., the SEQ # increments by one within the frame relay packet, and thus transmits data in a consecutive-block unit. However, the claims of the present application disclose transmitting data in a frame unit, and transmitting sequence numbers of a block and a sub-consecutive block related to a frame. That is, to a plurality of segmented consecutive frames is attached, at each head thereof, a header including the sequence numbers of the consecutive block and the sub-consecutive block.

In addition, Agarwal et al. does not disclose that a sub-consecutive block has a length measures in units of bytes as disclosed in the present application.

Based on at least the foregoing arguments, withdrawal of the rejections under §102(a) of Claims 1 and 5 is respectfully requested.

2. Rejection of independent Claims 1 and 5 under §103(a)

Claims 1 and 5 have been rejected under §103(a) as being unpatentable over Ahmadvand in view of Long and Cheng. Ahmadvand discloses a data link control protocol for a 3G wireless system. Long discloses a channel interface with data segmentation and re-segmentation. Cheng discloses a method and apparatus for segmentation and assembly of data frames for retransmission in a telecommunications system.

Although Ahmadvand et al., Lone et al. and Cheng et al. are similar to the present invention in the segmentation and sub-segmentation processes, their similarities end there. If Ahmadvand et al., Lone et al. and Cheng et al. are combined, a data stream produced is segmented into a block and a sub-segmented block; each data block is transmitted in a block unit; and the sequence numbers of the block and the sub-sequence block are attached to the block of the transmitted data. However, the data as recited in the claims of the present application is transmitted in a frame unit having a variable length; units for segmenting the data are measured in blocks and sub-sequence blocks, **but a unit is transmitted as a frame**. Thus, the data

according to the claims of the present application is transmitted having sequence numbers of the block and the sub-sequence block related to the frame. The Examiner is respectfully directed to the detailed description of FIG. 7 of the present application for support of this position.

Therefore, is it respectfully submitted that the combination of the cited references does not support the rejection of Claims 1 and 5 of the present application. Based on at least the foregoing arguments, withdrawal of the rejections under §103(a) of Claims 1 and 5 is respectfully requested.

Independent Claims 1 and 5 are believed to be in condition for allowance. Without conceding the patentability per se of dependent Claims 2-4 and 6-9, these are likewise believed to overcome the rejections under 35 U.S.C. §102(a), §102(e) and §103(a) and are allowable by virtue of their dependence on their respective independent claims.

Accordingly, all of the claims pending in the Application, namely, Claims 1-9, are believed to be in condition for allowance, therefore reconsideration and withdrawal of the rejections is respectfully requested. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Peter G. Dilworth", with a stylized flourish at the end.

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